

लोक सेवा आयोग
कर्मचारी सञ्चय कोष, प्राविधिक, कम्प्युटर, छैटौ, सहायक प्रबन्धक (कम्प्युटर इन्जिनियर) पदको खुला
प्रतियोगितात्मक लिखित परीक्षा
२०८०।०८।३०

KEY [D]

पत्र : प्रथम

समय : २ घण्टा १५ मिनेट

पूर्णाङ्क : १००

विषय : प्राविधिक विषय तथा व्यवस्थापन

उत्तरपुस्तिकामा प्रश्नपत्रको **KEY** अनिवार्य रूपले उल्लेख गर्नुपर्नेछ । उल्लेख नगरेमा उत्तरपुस्तिका रद्द हुनेछ । परीक्षामा **calculator, mobile** प्रयोग गर्न पाइनेछैन ।

Objective

Time : 45 Minutes

Multiple Choice

50×1=50 Marks

1. A does not keep track of address of every element in the list.
A) stack B) string C) linear array D) queue
2. Which of the following applications makes use of a circular linked list?
A) Recursive function calls B) Undo operation in a text editor
C) Implement hash tables D) Allocating CPU to resources
3. When 'recursion' is done which of the following data structure is found?
 A) Stack B) Arrays C) Linked list D) Queues
4. The main advantage of hash table is
A) easy to implement B) very efficient for few entries
C) faster access of data D) exhibit good locality of reference
5. In Artificial Intelligence, different learning methods does not include
A) memorization B) deduction C) analogy D) introduction
6. is not an application of AI.
A) Chat bots B) Face recognition C) DBMS D) LIDAR
7. AI is more related to algorithm.
A) Routing B) Divide and conquer C) Hill climbing D) Recursive
8. Neural networks are complex functions with many parameters.
A) linear B) non-linear C) discrete D) exponential
9. Which of the following is not a type of cloud server?
A) Public Cloud Servers B) Private Cloud Servers
C) Dedicated Cloud Servers D) Merged Cloud Servers
10. Which malware allows to access administrative controls?
A) Botnets B) Root kits C) Worms D) RATs
11. Which of the followings is the license issued by Nepal Rastra Bank to the wallet service provider?
A) PSO B) PSP C) POS D) SPP
12. Arduino-UNO is the IoT component which acts as
A) software B) hardware C) wireless network D) device protocol

Contd.....

27. Which of the following provides the interface to access the services of OS?
 A) System call B) Library C) API D) Assembly instruction
28. Special software to create a job queue is called a
A) drive B) linkage editor C) interpreter D) spooler
29. How do the viruses avoid basic pattern match of antivirus?
A) They are encrypted B) They act with special permissions
C) They modify themselves D) Self replication
30. How many pairs of stations can simultaneously communicate on Ethernet LAN?
A) 1 B) 2 C) 3 D) More than 3
31. Serial data transmission uses interface as standard by
A) 2 B) centronics C) RS232C D) ASCII
32. The ARP protocol operates on which layer of the OSI model?
A) Physical B) Network C) Session D) Application
33. A well defined groups that are numerically large in size but small compared to the network as a whole are used in routing.
A) Unicast B) Multicast C) Broadcast D) Telecast
34. The best functions have cohesion and coupling.
A) high, tight B) low, tight C) high, loose D) low, loose
35. Structure variable is referred by its
A) Name B) Data type C) Dot operator D) Member name
36. Which of the following operators is used to reference the memory location in C programming?
A) # B) * C) & D) \$
37. Which of the following syntax is correct for while loop?
 A) While (statement 1) statement 2 B) While (statement 1) else statement 2
 C) While (statement 1) do statement 2 D) While (statement 2) do else statement 1
38. A class all the behaviour and attributes of an object.
 A) Encapsulates B) Abstracts C) Inherits D) Instantiates
39. Operator overloading is
A) making C++ operators work with overloading
B) giving C++ operators more than they can handle
C) giving new meaning to existing C++ operators
D) making new C++ operators
40. The software process model is software process.
A) an abstraction of the B) an extension of the
C) a specialization of the D) synonymous to

41. What are the major activities of the spiral model of software engineering?
A) Planning, Risk Analysis, Engineering, Customer Evaluation
B) Defining, Prototyping, Testing, Delivery
C) Requirements
D) Quick Design, Build Prototype, Evaluate Prototype, Refine Prototype
42. A good software requirement specification does not have the characteristics
- A) completeness B) consistency C) clarity D) reliability
43. In software engineering, module A writes in some attributes of module B. What type of coupling is there between A and B?
A) Common B) Content C) Control D) External
44. In the maintenance phase the product must be tested against previous test cases. This is known as testing.
A) Unit B) Integration C) Regression D) Module
45. If mean time between failure (MTBF) is 20 days, mean time to repair (MTTR) is 20 hours, then software reliability is
- A) 96% B) 90% C) 50% D) 24%
46. When normalization is not done, then there may be the problem of
- A) lost updates anomaly B) data deletion anomaly
C) insertion anomaly D) deadlock problem
47. The initial state of a transaction is known as state.
A) Aborted B) Active C) Failed D) Partially committed
48. Database locking concept is not used to solve the problem of
- A) lost update B) uncommitted dependency
C) inconsistent data D) data backup
49. In what condition is the database left in an inconsistent state?
A) Transactions being aborted B) Roll forward after a failure
C) Deadlock D) Transaction fails
50. What is the time complexity of the binary search algorithm?
A) $O(1)$ B) $O(n)$ C) $O(\log_2 n)$ D) $O(n^2)$

- The End -

उत्तरपुस्तिकामा KEY अनिवार्य रूपमा लेख्नुहोला ।